



AFCESA A-GRAM



AIR FORCE CIVIL ENGINEER SUPPORT AGENCY

00-05

FEBRUARY 2000

IMPROVED HERBICIDE APPLICATION TECHNOLOGY

SYNOPSIS:

Controlling vegetation on Air Force real property is important to the morale of our service members and in some cases directly relates to accomplishment of flying missions. AFCESA, through the Management Equipment and Evaluation Program (MEEP), has identified new equipment, known as the WeedSeeker Selective Spray System, that will allow BCE organizations to save 50% of labor cost and 75% of herbicide cost while reducing operator exposure to chemicals when applying herbicides. In addition, this equipment will assist installations in meeting their pesticide reduction targets. It takes advantage of new developments in optoelectronics technology, which allows intermittent or spot spraying of herbicides only where chlorophyll is detected.

VEGETATION

MANAGEMENT PROBLEMS:

Airfield runways, parking lots, maintenance yards, railroad tracks, and roadways are just a few of the areas that require total vegetation control by application of herbicides. Manpower reductions and a tasking from DoD to reduce pesticide use also complicate our desire to maintain a high standard of appearance on Air Force installations. Application of herbicides on airfields is oftentimes sensitive due to high use demands.

EVALUATION OF NEW TECHNOLOGY:

Working with the MEPP office, Pest Management Shop personnel at Nellis AFB NV assisted in evaluating the WeedSeeker DB210 Selective Weed Spray System. The equipment was easy and simple to use. Chemical application with this system is fast (10 miles/hr) and can even be made at night. Another significant advantage of this equipment over conventional sprayer models is the reduced exposure to pesticides for our personnel and the environment. The evaluation results led to a recommendation for Air Force-wide use.

EQUIPMENT COMPOSITION:

The DB210 System consists of 10 WeedSeeker sensors mounted on a double-boom rigid bar, which can be attached to the front or rear of a vehicle. The DB210 covers an area 10 feet wide and is ideal for use on airfields or other hardstand areas. The equipment is normally mounted on the Gator Utility (see A-Gram 99-07), but other equipment can be used

for mounting the sprayer.

COST AND SOURCE:

The cost of the unit as shown is estimated to be \$22,500. For more information on the WeedSeeker, contact: Patchen Inc., 1147 North State Street, Ukiah, CA 95482, 888-728-2436, or www.weedseeker.com.

CONTACTS:

For a copy of MEPP Evaluation EC98-08, contact Mr. Jim Hendrix, project manager, DSN 872-4217, ext. 235; Fax: 872-3537/8557, e-mail: Jim.Hendrix@eglin.af.mil.

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